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Rethinking some aspects of trade in the Arabian Gulf

D. T. Potts

Introduction

Ever since the publication of A. L. Oppenheim's seminal review of UET V (Oppenheim 1954) the dynamics of Bronze Age trade in the Arabian Gulf have been a subject of endless fascination for both archaeologists and Assyriologists. The literature on this subject has become enormous, and I am only presuming to add yet another paper to an already swelling corpus because the ongoing excavations at Tell Abraq have brought to light what is in some cases unique material which, as my title suggests, calls for a reconsideration of certain ideas, both new and old, in this field. Tell Abraq (Fig. 1), a stratified mound covering c. 4ha and rising to a maximum height of 10m above the surrounding plain, is located near the coast of the United Arab Emirates in the emirate of Umm al-Qaiwain (Potts 1990a, 1991). Three seasons of excavation (1989; 1990; 1992) have revealed an apparently continuous sequence of occupation spanning the period between c. 2500 and 500 BC. While it certainly does not provide answers to all the questions which need rethinking in Gulf archaeology, it does provide a substantial amount of new data which help one to view certain problems in a new light. This essay, therefore, is inspired primarily by three years of excavation at Tell Abraq and secondarily by a consideration of the large quantity of recently excavated or published material from other sites in the Gulf region. It is concerned primarily with developments in south-eastern Arabia, ancient Magan, and only secondarily with Dilmun. Throughout the discussion, I accept the identification of the Oman peninsula with the land known in cuneiform sources as Magan (for further elaboration, see Potts 1990b: 133–50). Where absolute dates are given for the reigns of Mesopotamian rulers I follow J. A. Brinkman's chronology (Brinkman 1977).

Mesopotamia and Magan in the third millennium BC

Magan, and perhaps even Meluhha in the third millennium BC, received large amounts of barley from Mesopotamia . . . despite Oman's own agricultural economy, third millennium Oman/Magan's grain production may not have been fully adequate to support the large numbers of workmen and artisans engaged in the copper-mining industry . . . Southern Mesopotamia exported far more grain to Magan as return-cargo than has previously been realized.

(During Caspers 1989: 14, 17)

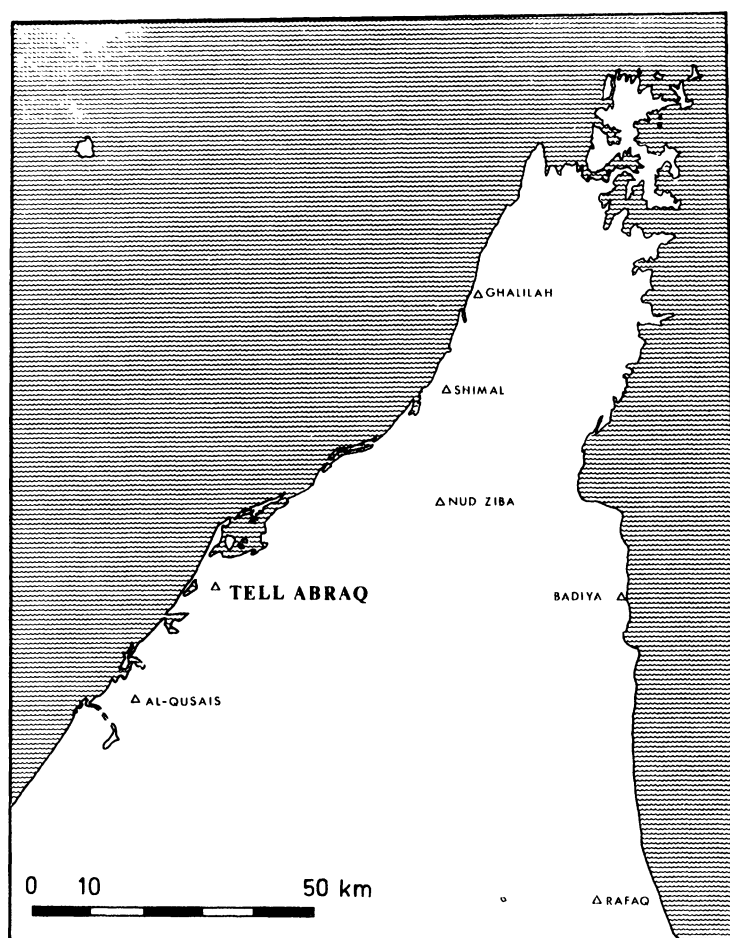


Figure 1 Map of Northern Emirates showing the location of Tell Abraq.

The author of the statement quoted above has followed a suggestion made some years ago by the eminent Assyriologist W. F. Leemans (Leemans and Kroll 1984: 25), who proposed that the large stocks of cereals generated by the agriculturally-based estates of southern Mesopotamia could have been used to pay for the regular import of foreign commodities such as copper. A similar suggestion has been made with reference to the acquisition of imports from the Iranian plateau (cf. Crawford 1973; Kohl 1978). What evidence is there that this took place?

No pre-Sargonic or Sargonic royal inscriptions or economic texts record any such movement of cereals between southern Mesopotamia and Magan, nor do any texts from the period of Gudea. There is, in fact, but one solitary text (ITT ii 776) from Tello (ancient Girsu) which is even vaguely relevant to the argument. In the year Šu-Sin 8 (2030 BC) the *ensi* of Girsu issued a consignment of 70 (or 600, the number is unclear, cf. Steinkeller 1982: 249, n. 40) bushels (*gur*) of barley to one B/Pudu (Heimpel 1987: 81, §48). This was qualified in Sumerian as *gú Má-gan*^{ki} – *šè*, which may be translated as ‘cargo for Magan’.

Nothing in this text compels us to see it in connection with the purchase of copper, however. In contrast, a slightly later text from Ur (UET III 1689) dating to the year Ibbi-Sin 4 (2025 BC), concerning the well-known merchant Lu-enlilla, explicitly notes that the goods which he received from the Nanna temple were *níg-šám-ma urudu-Mágan*^{ki}, or 'goods issued for the purchase of Magan copper' (Heimpel 1987: 81, §46). Lu-enlilla, however, was never issued cereals for the purchase of copper. Rather, he paid for his purchases with textiles and wool, both abundantly produced by the gigantic textile 'factories' of southern Mesopotamia during the Ur III period (cf. Waetzoldt 1972). So much for the large-scale export of grain to Magan in the third millennium.

There is, however, another way of evaluating this hypothesis which its advocates have overlooked. By now, the excavation of numerous third millennium burials in the Oman peninsula has yielded the remains of hundreds of prehistoric Maganites. Dental anthropological studies, in particular, reveal a good deal about the diet of these people. If the kind of massive export of grain to the Oman peninsula envisaged by Leemans and During Caspers ever occurred, it would be recognizable in the acquired characteristics of the ancient population's teeth. K. Højgaard's investigations of the teeth recovered from third millennium (Umm an-Nar period) graves on Umm an-Nar island, located on the coast of the United Arab Emirates near Abu Dhabi (1980: 363, cf. 1984: 202) and in the Wadi Jizzi, near Sohar on the Batinah coast of Oman (1984: 202–3, 1985: 151–6), have shown that cereals played no role in the diet of these coastal populations, who were largely dependent on fish, turtle and dugong for their protein. On the other hand, cereals were at least in part responsible for the carious lesions and fractures visible on teeth from third millennium graves excavated at Jabal Hafit (Højgaard 1985: 151–5) and Maysar (Kunter 1983: 339–40) in the interior of the Oman peninsula. But the remains of cereals found, for example, at the third millennium inland settlement of Hili 8 (Cleuziou and Costantini 1980; Cleuziou 1989: 79–80), where wild wheat, wild barley, domesticated two-row barley, six-row hulled barley, emmer and sorghum are present, along with the date-palm (Potts 1990b: 130), show clearly that the interior of the Oman peninsula possessed a varied agricultural regime. This point, combined with the absence of any strong Mesopotamian influence in the third millennium assemblages of south-eastern Arabia and the lack of cuneiform references to grain export, suggests that the putative mass export of Mesopotamian cereals to Magan is illusory. The arguments raised against P. L. Kohl's suggestion that surplus grain was being exported *en masse* from Mesopotamia to the Iranian plateau in the third millennium (Potts 1982: 40–1; Carter 1990: 94) are just as appropriate in the case of alleged cereal exports from Mesopotamia to Magan.

What certainly did reach Magan, judging by the typical Early Dynastic III storage jars found in five of the third millennium burials on Umm an-Nar island (Frifelt 1991: figs 86–90, 125–8, 137, 179–81, 207), was something liquid. Provenience studies have demonstrated that the vessels analysed were actually manufactured in southern Mesopotamia (Mynors 1983). In this regard, it is interesting to recall that, in the second year of the reign of Ibbi-Sin (2027 BC), the text UET III 1511 informs us that Lu-enlilla was given, among other things, 6 *kúr* or 1515.6 litres of good sesame oil with which to purchase copper, and that the oil was on board a ship bound for Magan (Potts 1990b: 145). Several hundred years earlier, oil may likewise have travelled to Magan in the large, pear-shaped Mesopotamian storage jars found by the Danish expedition on Umm an-Nar.

Magan and the Indus Valley in the late third millennium BC

In historical perspective, it is worth stressing that during the critical phase of intense political confrontation between the Akkadian empire and the southern states of 2300–2200 BC, Oman was still culturally close to the Iranian east and included in the great Euphratic circuit of exchange. Only after the collapse of the Akkadian empire . . . do Harappan artefacts begin to be found.

(Cleuziou and Tosi 1989: 43)

How tenable is this view?

To attempt to distinguish archaeologically an Old Akkadian context of 2300–2200 from an immediately post-Akkadian context of 2200–2000 BC in the Oman peninsula is probably unwise if not impossible. Both calendric dates would be classified as ‘late Umm an-Nar period’ by most scholars working in the area. This is not to deny the fact that, in historical terms, contemporaneity with the Old Akkadian period as opposed to the Ur III empire is an important distinction. In reflecting on whether the Harappan penetration of the Arabian Gulf began before or after the collapse of the Akkadian empire, one is immediately reminded of Sargon of Agade’s boast that ships from Dilmun, Magan and Meluhha moored at the quay of Agade (Gelb and Kienast 1990), suggesting that, if Meluhhan (= Harappan) ships reached Babylonia by the early Akkadian period, they are likely to have been visiting the coast of Magan at that time as well.

Confirmation of some form of contact between the Indus Valley and the Oman peninsula during the late Old Akkadian period is provided now by Tell Abraq, where two Harappan weights (Plate 1) weighing 14.20 and 53.95g respectively, and a quantity of unpainted sherds from one or more storage jars, made of a very hard-fired, finely levigated, orange paste which are almost certainly Harappan (Fig. 2), have been recovered in a fireplace located within a large, circular fortress-tower (I owe both the reconstruction of the vessel illustrated and the identification of this pottery as probably Harappan to Prof. Rita P. Wright, New York University, the ceramicist of the American expedition which has been excavating Harappa since 1986). Thus far, the earliest date (K-5582) from the fortress-tower is 2570–2510 cal. BC ($\pm 1\sigma$ 2860–2460 cal. BC), and this probably signals the period in which the building was constructed. A corrected C14 date (K-5578) of

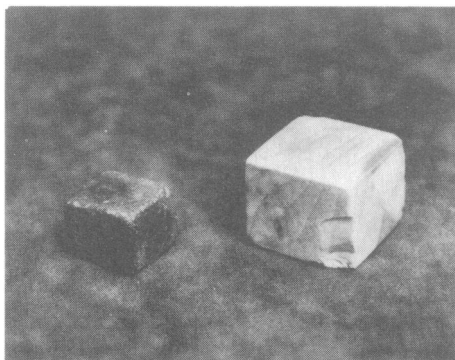


Plate 1 Harappan weights from Tell Abraq; left, TA 125 (14.20g, made of jasper (?), and right, TA 146 (53.95g), made of highly polished, banded chert.

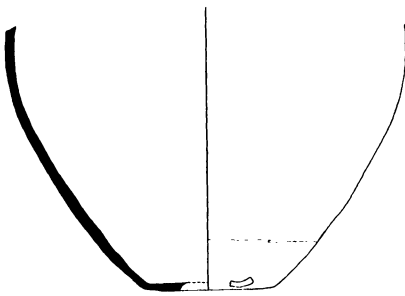


Figure 2 Reconstructed profile of TA 1811; very hard-fired red-orange, orange and cream wash; no visible temper; base diameter 12cm.

2170–2140 cal. BC ($\pm 1\sigma$ 2280–2030 cal. BC) run on carbonized date stones has been obtained from the fireplace within which the weights and sherds just mentioned were found. From just outside the fireplace we have three more dates which all fall within the 2190–2140 cal. BC range. If we work on the basis of the calibrated dates, we are looking at a context that would be contemporary with the end of the Akkadian period (Brinkman 1977: 336). However, the weights were found in the fireplace as ‘discards’, and thus it is logical to assume that their use predates the C14 date by some years. This could easily push the date of their period of use back into the middle of the Old Akkadian period if not earlier. There seems, then, no justification for the view that Harappan contact with south-eastern Arabia was an exclusively post-Akkadian phenomenon.

The presence of Harappan storage jars at Tell Abraq is also intriguing. It is obvious that unpainted storage jar sherds are more likely to go unnoticed than the characteristic and more immediately recognizable black-painted Harappan pottery found at other sites in south-eastern Arabia (e.g. at Ras al-Junayz by the Joint Hadd Expedition). Once identified, however, the question arises what was being transported. While R. P. Wright has expressed some uncertainty as to whether the remains of Harappan vessels found on sites in the Gulf were imported for their innate value as ceramic containers or for their contents (Wright 1991: 72), P. Gouin has recently suggested that secondary dairy products, such as dried cheese (*qurut*) may have been travelling in jars of this sort to the Oman peninsula (Gouin 1990: 49). This is an interesting suggestion which could perhaps be confirmed by residue analysis. Was Harappan cheese a novelty to the Arabian palate which was so valuable that it was decanted and weighed using the Harappan weights recovered in the same context?

Mesopotamia and Magan in the second millennium BC

After the collapse of the Dynasty of Ur, Telmun replaces Makkan in the Eastern trade of the city. The latter country is not mentioned any more . . . in our volume of tablets [UET V] of the Larsa Period . . . Telmun, as against Makkan, seems never to have completely lost contact with Mesopotamia.

(Oppenheim 1954: 15)

. . . the modalities of copper trade became different. The Makkan boats were no longer

reaching the ports of Sumer, and everything seems at that time to have been in the hands of Dilmun merchants . . . We do not know if restricted oasis life continued, but 20 years of archaeological research have failed to locate anything before the second quarter of the first millennium BC, when the introduction of underground water systems from Iran again made oasis agriculture a valuable alternative economic pattern.

(Cleuziou 1981: 292)

The above quotations typify a number of perceptions which are widely held and in need of some modification. To simplify the analysis of these views, it is best to enumerate the points embedded in them one by one.

1. Magan is not mentioned in cuneiform sources after the Ur III period.
2. Magan continued, however, to supply the copper being retailed by Dilmun during the Isin-Larsa and early Old Babylonian eras, even though it was not mentioned as such in the cuneiform sources.
3. Settled life in the Oman peninsula, i.e. Magan, ceased c. 1700 BC, roughly at the time when Dilmun stopped supplying copper to Babylonia, and did not resume until the early Iron Age.

That Magan is not mentioned in post-Ur III cuneiform sources until the time of Tukulti-Ninurta I (1243–1207 BC; for the texts, see Grayson 1987: 237ff.) is well known, and no evidence, from Ur or any other site, has been discovered in the past four decades which invalidates Oppenheim's general point. It was purely coincidental, however, that the 'first' second-millennium assemblages discovered in the Oman peninsula dated to the early second millennium (Potts 1990b: 232–4), and that, as Cleuziou noted above, twenty years of searching failed to find anything which filled the gap between the Wadi Suq period, then put at c. 2000–1700 BC, and the Iron Age. This state of affairs fully justified his characterization of the people of the Wadi Suq period as 'the last known sedentary culture before the transition of eastern Arabia to full time nomadism' (Cleuziou 1981: 279), and indeed inspired C. Edens to add fuel to the fire by characterizing this interval as 'a thousand years of negative evidence' (Edens 1986: 204). But the coincidence between the cessation of Dilmun's role as Babylonia's southern supplier of copper, and the apparently short-lived nature of sedentary life in the Oman peninsula during the early second millennium, was more apparent than real. Sedentary life in the Oman peninsula did not cease altogether around the time when Dilmun stopped supplying Babylonia with copper. The 'great collapse' was an artifact of our archaeological ignorance, as excavations at both Tell Abraq and Shimal have shown.

Work on the settlement at Shimal (Ras al-Khaimah), which began in 1985 (excavations of graves there, discovered in 1968, had already begun in 1976–7), revealed a sedentary, coastal community which dated to the middle (c. 1600–1400 BC) of the second millennium (Velde 1991; Méry 1991; Potts 1989: 711–12; cf. Vogt and Franke-Vogt 1987: 34–6 for the similar dating of tomb SH 102). At Tell Abraq, on the other hand, we have a continuous sequence of sedentary occupation extending from the middle of the third millennium through the middle of the first millennium BC (Potts 1990a; 1991). The monumental fortification of late third-millennium date currently under excavation (for preliminary accounts, see Potts 1990a: 22–52; 1991: 21–5; note that excavations in 1992 confirmed that

what had previously been considered two buildings are in fact two phases of one and the same building) was refurbished in the early second millennium, showing no signs of abandonment. Ceramically, we can distinguish three phases within the pre-Iron Age second millennium, i.e. the period c. 2000–1200 BC (Potts 1990a: 60–77; Velde 1992).

From the newly discovered second-millennium assemblages at Tell Abraq come a number of sherds which, by virtue both of their shape and paste, are clearly foreign. I have divided these into sherds which can be paralleled largely in the Isin-Larsa and Old Babylonian period (Fig. 3 and Table 1), and those which are more at home in the Kassite and post-Kassite era (Fig. 4 and Table 2; see also the discussion of Elamite parallels below). Their presence stands in stark contrast to the impression given by the cuneiform sources in which Magan seems to do a disappearing act between the demise of the Third Dynasty of Ur (c. 2000 BC) and the reign of Tukulti-Ninurta I in the second half of the thirteenth century BC, and suggests that indeed there was some contact between the upper

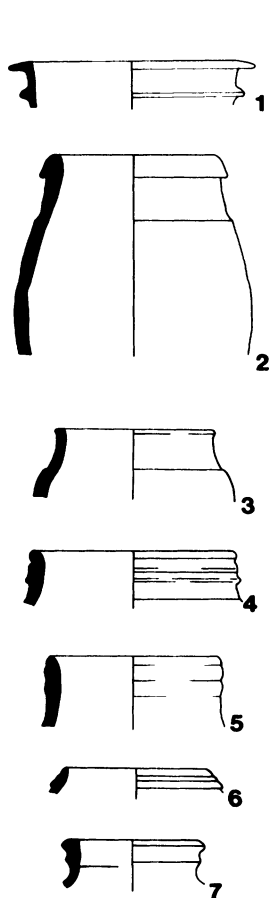


Figure 3 Mesopotamian forms, largely of the earlier second millennium BC, from Tell Abraq (cf. Table 1).

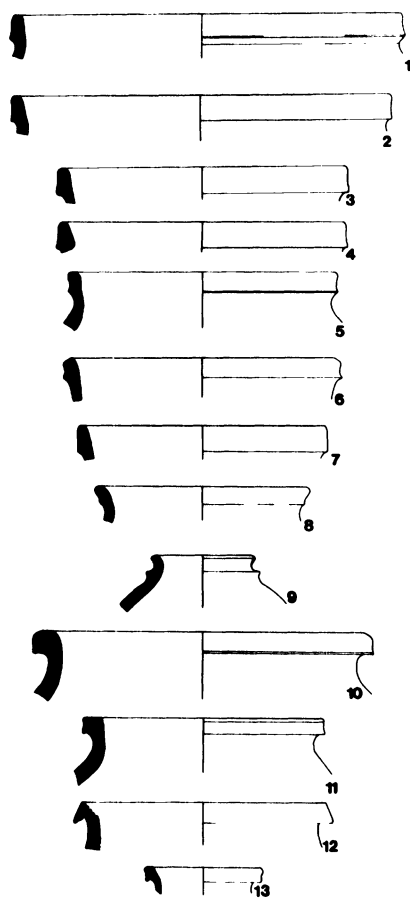


Figure 4 Kassite and Middle Elamite forms from Tell Abraq (cf. Table 2).

Table 1 Notes to Figure 3.

Fig. 3.	Reg. no.	Reference	Description	Brief comparanda and date range
1	TA 379	Potts 1990a: fig. 115.1	Finely levigated orange/tan; rim dia. 14cm	Old Babylonian Nippur (Ayyoub 1982: 46)
2	TA 2177	Potts 1991: figs 43.5, 44	Green-buff, chaff and some grit; rim dia. 12cm	Late Isin-Larsa Diyala (Ayyoub 1982: 61); cf. Failaka (Højlund 1987: figs 187–91), Khor-Ile (Edens 1981: fig. 6)
3	TA 1620	Potts 1991: fig. 73.4	Hard tan chaff, black slipped; rim dia. 11cm	Late Isin-Larsa/Old Babylonian Diyala (Ayyoub 1982: 84–6); Failaka (Højlund 1987: figs 238, 240)
4	TA 2875	unpublished	Porous green buff, no visible temper; rim dia. 14cm	Old Babylonian through Kassite Mesopotamia, Failaka, Bahrain (Højlund 1987: figs 206–18)
5	TA 1565	Potts 1991: figs 47.5, 48	Soft green-buff; rim dia. 12cm	As Fig. 3.4
6	TA 991	Potts 1990a: fig. 105.6	Yellow-buff; rim dia. 10cm	Old Akkadian (?) through Isin-Larsa Mesopotamia (Ayyoub 1982: 49, 53; Barbar temple III, early Kassite Failaka (Højlund 1987: fig 212)
7	TA 2828	unpublished	Sandy tan, fine shell (?) and chaff, grey core; rim dia. 9cm	Old Babylonian through Kassite Mesopotamia, Failaka (Højlund 1987: fig. 195)

Table 2 Notes to Figure 4.

Fig 4.	Reg. no.	Reference	Description	Brief comparanda and date range
1	TA 2964	unpublished	Fine tan chaff and grit, grey core; rim dia. +40cm	Middle Elamite Susa (de Miroschedji 1981: fig. 13.13; Carter and Stolper 1984: fig. 11.9) and Tal-i Malyan (Carter and Carrothers 1980: fig. 1); Kassite Hamrin (Boehmer and Dämmer 1985: Taf. 42.167, 47.194-6, 198, 126.297-9,, 127.306-9, 311-12); Failaka (Højlund 1987: fig. 196)
2	TA 2976	unpublished	Buff chaff and grit; rim dia. 40cm	As Fig. 4.1
3	TA 2077	Potts 1991: fig 73.5	Pink buff grit and fine chaff; rim dia. 30cm	As Fig. 4.1
4	TA 982	Potts 1990a: fig. 105.8	Tan-orange grit, grey interior, smooth exterior; rim dia. 30cm	As Fig. 4.1
5	TA 1535	Potts 1991: fig. 46.1	Red-orange grit and fine chaff, grey core; rim dia. 28cm	As Fig. 4.1
6	TA 531	Potts 1990a: fig. 87.1	Heavy brown grit; rim dia. 28cm	As Fig. 4.1
7	TA 515	Potts 1990a: fig. 90.6	Coarse tan with fine chaff, grey core; rim dia. 26cm	As Fig. 4.1
8	TA 2050	Potts 1991: fig. 47.2	Smooth, coarse tan grit; rim dia. 22cm	As Fig. 4.1
9	TA 525	Potts 1990a: fig. 87.2	Smooth tan, no visible temper; rim dia. 10cm	Middle Elamite Susa (de Miroschedji 1981: fig. 10.18)
10	TA 327	Potts 1990a: fig. 98.8	Hard-fired orange with grey core; rim dia. 32cm	Kassite Hamrin (Boehmer and Dämmer 1985: Taf. 108.44-7, 124.263-5)
11	TA 754	Potts 1990a: fig. 80.3	Heavy brown/black; fine chaff; rim dia. 22cm	As Fig. 4.10
12	TA 337	Potts 1990a: fig. 97.5	Sandy red/orange; rim dia. 26cm	Kassite Hamrin (Boehmer and Dämmer 1985: Taf. 43.173, 175, 109.79/225, 126.285)
13	TA 1885	Potts 1991: fig. 46.11	Sandy grey-tan; grey core; rim dia. 10-12	As Fig. 4.12

and lower Gulf during the second millennium. This suggests that Cleuziou and Tosi's characterization of the second-millennium Wadi Suq culture as 'an Omani entity selectively trading with two different neighbours: the powerful territorially integrated Indus Civilization seeking raw materials for its own consumption to the east and the mercantile centres of Dilmun to the west' (Cleuziou and Tosi 1989: 42) is far too restrictive. Indeed, even before the discovery of second-millennium Mesopotamian pottery at Tell Abraq, Wadi Suq soft-stone (*série tardive*) of Omani origin had been found in Old Babylonian contexts at both Ur and al-ʿUbaid (Potts 1990b: 252 with refs).

Most of the sherds illustrated in Figures 3 and 4 are easily distinguished from local products because of their foreign paste and shape, but there are several sherds from Tell Abraq of obviously local paste which, however, show a characteristically Babylonian shape (e.g. Figs 3.7; 4.1, 4-7, 10, 13). This introduces a measure of acculturation into the discussion which had never previously been observed. When Babylonian vessels appeared at Tell Abraq they must have been striking enough to have induced the indigenous potters, at least on occasion, to copy them.

The subject of the southern Gulf's contact with the north in the second millennium is, however, far more complex than the simple sketch given above. Without doubt, some of the Isin-Larsa, Old Babylonian or Kassite types may in fact have originated in some part of Dilmun, for some of the same forms and fabrics are attested on Failaka (Kuwait), Bahrain, in the Dhahran tomb field (Eastern Province of Saudi Arabia) and on the north-east coast of Qatar. On the other hand, some of what appears to be Kassite pottery may in fact be Middle Elamite. It is obviously of as much interest to know to what extent Magan sustained relations with Dilmun and Elam, as it is to chart her relations with Babylonia. These are questions to which I will now turn.

Dilmun and Magan in the second millennium BC

As noted above, it has generally been assumed that the copper sold by Dilmun to Babylonian merchants in the early second millennium BC must have originated in Magan. When S. Cleuziou reviewed the archaeological evidence of contact between Dilmun and Magan in the second millennium, however, he was forced to conclude that it was 'rather weak' (Cleuziou 1986: 152). If we consider 'greater Dilmun', i.e. Failaka and eastern Saudi Arabia, as well as Bahrain, we can add a few more items to the list put together by Cleuziou.

Socketed spearheads comparable to Wadi Suq examples have been found on Bahrain at 'Ali, Diraz (Cleuziou 1986: 150), Al Hajjar (Lombard and Kervran 1989: 29, §42), Barbar temple II (Glob 1958: fig. 12b) and Saar (Killick et al. 1991: fig. 16.1), as well as in a grave west of Jabal Makhruq (south-west of the Yabrin oasis) in eastern Saudi Arabia (Bibby 1973: fig. 57). The northward spread of second-millennium, Wadi Suq-type soft-stone, discussed above with reference to Ur and al-ʿUbaid, encompassed Dilmun as well. In 'Dilmunite' territory this kind of soft-stone has been found on Failaka, Tarut, Bahrain and in the Dhahran tumuli (Potts 1990b: 251-2; Potts 1986: 151; exhaustively reviewed in Häser 1988: 67-99; for the two Dhahran finds, see Zarins 1989: 83; for the new finds from Saar, see Killick et al. 1991: fig. 16.2-3). Spouted vessels of Wadi Suq type were also found

by the Danish expedition on Failaka (Højlund 1987: figs 154–6; Potts 1989: 710), and a painted sherd from a Wadi Suq beaker was found near the third Barbar temple on Bahrain (Potts 1990b: 248).

Of Dilmunite finds found in Magan territory, we can cite a Dilmun seal from a re-used grave at Mazyad, near Jabal Hafit in the interior of Abu Dhabi (Cleuziou 1981: fig. 8), while several sherds from the settlement at Shimal compare well with Failaka types as well (Velde 1991: fig. 17, cf. Failaka types 55A, 55C, and 56B). Moreover, as noted above, some of the generically Mesopotamian (and/or Elamite) types found in second-millennium contexts at Tell Abraq can also be paralleled in the Failaka and Qalat al-Bahrain sequences (Potts 1990a: figs 87.1, 90.6, 105.8, cf. Højlund 1987: fig 196), as can some of the local, painted wares (e.g. Potts 1990a: fig 74.14; cf. Højlund 1987: fig. 435; possibly Potts 1990a: fig. 81.2; cf. Højlund 1987: figs 55–6).

More importantly, the excavations at Tell Abraq, for the first time in the archaeology of south-eastern Arabia, have brought to light a sizeable quantity of Dilmun red-ridged pottery (Plate 2), characteristic of City II in the Bahraini sequence. Over the course of three seasons, no fewer than 298 red-ridged sherds have been identified from early second-millennium contexts (Potts 1990a: 25, table 1; 1991: 72–4; unpubl. field records). In addition, a single, scored rim fragment from a sac-shaped Dilmun burial jar (Fig. 5) has also been found. A particular kind of ridged pottery, characteristic of the middle of the second millennium at Tell Abraq, occurs as an Omani import at Khor on the coast of Qatar (Potts 1990a: fig. 80.4; cf. Edens 1981: fig. 6, middle), as pointed out to me by my Tell Abraq colleague, C. Velde.

Moreover, it now appears that a local, second-millennium stamp seal tradition existed in the Oman peninsula, inspired perhaps by Dilmun glyptic. The unique seal TA 495 (Fig. 6), found at Tell Abraq in 1990, has the general shape of a Dilmun seal, though without the raised boss and dotted double circles. It shows a striding male (god?) above a horned caprid. In shape and general conception the seal is clearly reminiscent of Dilmun glyptic, though just as clearly not a genuine product of a Dilmun stamp seal workshop. More likely than not, it was a local product, and it is tempting to suggest that the seal may have been used by someone engaged in commerce with Dilmun.

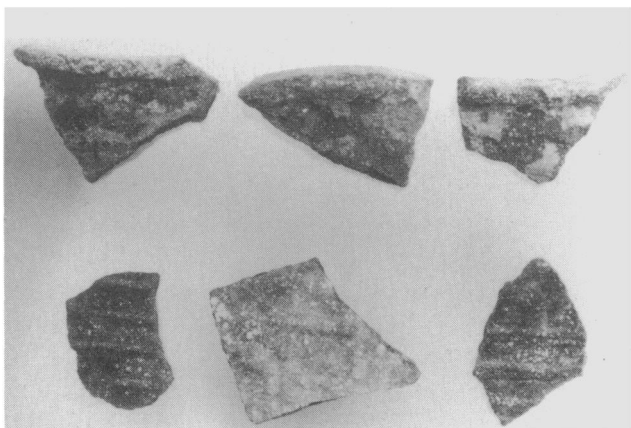


Plate 2 City II red-ridged sherds from Tell Abraq.

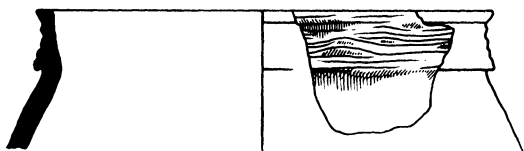
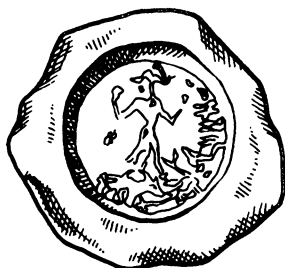


Figure 5 TA 989, hard-fired redware with crudely scored rim; rim diam. 12cm (= Potts 1990a: figs 77, 78.9).



Figure 6 TA 495, a black soft-stone stamp seal, 2cm in diam., 1cm high (= Potts 1991: figs 67–8).



Elam and Magan in the second millennium BC

That Elam, broadly defined, enjoyed some form of contact with Magan during the late third millennium is unquestionably indicated by the number of *série récente* soft-stone vessels of undoubted Omani origin found at Susa and Bandar Bushire (de Miroschedji 1973: figs 8.7–9, 9.2–3; Pézard 1914: pl. VIII.4). With the benefit of twenty years of research in the Oman peninsula unavailable to P. de Miroschedji when he wrote his fundamental study of the soft-stone from Susa, it is now an easy matter to distinguish these Omani products from their Central Asian or Iranian counterparts. Several pieces of obviously second-millennium soft-stone are also known from Susa and Bandar Bushire (de Miroschedji 1973: pl. VIIe; Pézard 1914: pl. VIII.2, 5; these finds have recently been discussed by Häser 1988: 100–2), and four recently published soft-stone sherds from Haft Tepe are almost certainly of Omani origin as well (Negahban 1991: pl. 29.205).

Yet, if these finds represent the Magan imprint in Susian or Elamite territory, until very recently nothing could be claimed to represent the Susian or Elamite imprint in Magan. Three seasons of excavation at Tell Abraq have now brought to light a number of sherds (Fig. 4) which find good parallels in the Middle Elamite repertoire at sites like Susa, Tal-i Malyan and Tepe Farukhabad, as well as a faience cylinder seal (Plate 3) which shows characteristics of Middle Elamite glyptic (e.g. the use of faience, the hatched border and the tree motif) well attested at Susa and Choga Zanbil. The Middle Elamite date of this material is particularly interesting in view of the fact that at least one of the soft-stone vessel fragments of Omani origin from Bandar Bushire (Pézard 1914: pl. VIII.2) comes from a level which can be assigned to the Middle Elamite period on the basis of its ceramics

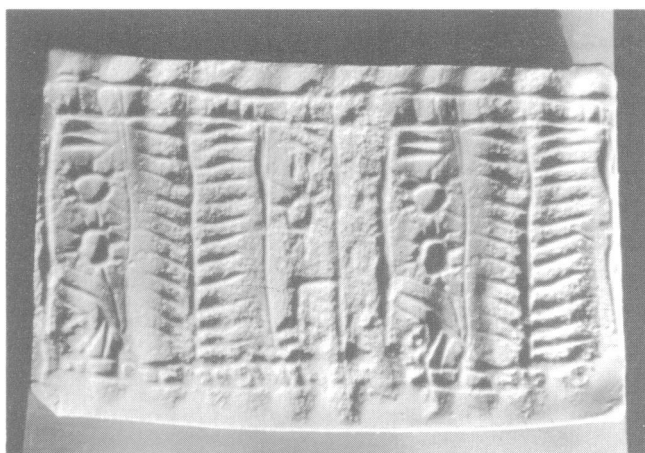


Plate 3 Impression of TA 12, a faience cylinder seal, 4.1cm long, 1.2cm in diam.

(Häser 1988: 100), while one of the Susa pieces (de Miroschedji 1973: pl. VIIe) comes from the foundation deposit of the Inšušinak temple which was probably buried in conjunction with one of the Middle Elamite restorations of the building (Häser 1988: 101; cf. Carter and Stolper 1984: 37, 157).

Just as we have some difficulty distinguishing the Kassite from the Middle Elamite ceramic parallels at Tell Abraq, so too is it impossible at this point to determine how the chronological position of the Middle Elamite items at the site relates to the changing history of Kassite–Elamite political relations during the second half of the second millennium. Conversely, it would be interesting to know whether the appearance of Omani soft-stone on Middle Elamite sites reflects a sequence of political or economic changes in Elam's relationship with Magan or can be explained by the more mundane vagaries of travelling individuals who reached sites like Bandar Bushire, Susa and Haft Tepe with a few stone bowls in hand. Did the growth of ties between Magan and the Middle Elamite state post-date the documented presence of Kassite governorship in Dilmun (Potts 1990b: 307–14)? Did the powerful Middle Elamite state forge an alliance with Magan which impacted upon the Kassite presence in Dilmun? Did it have anything to do with the decline of Kassite influence in the region? What relation, if any, did these developments have to Tukulti-Ninurta I's defeat of the Kassites in southern Babylonia? Are the ceramic, soft-stone and glyptic parallels between sites in Susiana and the Omani peninsula noted above 'fall-out' from a hitherto unsuspected trade in copper between Magan and Elam?

Finally, on a more mundane, archaeological level, the presence of Kassite and Middle Elamite types in late Wadi Suq period contexts at Tell Abraq has implications for the date of the beginning of the Iron Age in south-eastern Arabia, currently placed around 1350/1300 BC by Boucharlat and Lombard (1991: table 4). Finds which would be paralleled in Susiana in the thirteenth or even twelfth century, yet which come from pre-Iron Age, late Wadi Suq deposits at Tell Abraq, suggest that the date of the beginning of the Iron Age in the Omani peninsula may need to be lowered.

Conclusion

[By the time of Sennacherib] it becomes evident that Telmun has again access to the copper mines of Makkan, to the spices, perfumes and rare woods of the East. The merchants are importing again these staples into Mesopotamia: the mysterious barrier which interrupted the trade routes towards the East for a full millennium seems to have been removed. What movements of nations, changes of military and political power or technological developments had been at work to first restrict the Eastern horizon of Southern Mesopotamia and to open it again – we will probably never know.

(Oppenheim 1954: 17)

Three seasons of excavation at Tell Abraq have brought to light unexpected material which calls into question some of the conventional wisdom of Gulf archaeology, as well as some of the newer hypotheses put forward by scholars working in the region today. Perhaps more than anything else, the material discussed above demonstrates that there were more connections spanning a greater period of time between Magan and Dilmun, Magan and Elam, and Magan and Mesopotamia, than ever before imagined. The silence of the cuneiform sources and the apparent interruptions in contact no longer seem quite so unequivocal. There is evidence for contact between Magan and her northern neighbours from the early third millennium, when the Hafit graves containing Jamdat Nasr-type and Early Dynastic jars occur (Potts 1986: figs 1–5), through the second millennium BC, and although it may appear at times as if there are gaps of several centuries here and there for which we have no evidence, the example of Tell Abraq should warn us that the excavation of a single site can dramatically alter that perception by providing new material which fills those gaps. Absence of evidence, as we are often told, is not evidence of absence. In short, the resumption of Mesopotamian contact with the east to which Oppenheim referred in the passage quoted above was no resumption at all. The cuneiform sources may have been silent on the subject of Magan over the preceding millennium but the sherds, stone vessels and glyptic remains leave no doubt that contacts between Mesopotamia and Magan must have persisted, even if they went unmentioned in the written record.

Nor does the thread of continuity in contacts between Magan and her northern neighbours reach an end at the close of the second millennium. In the seventh century BC Pade, king of Qade, whose capital was at Izki in Oman, brought tribute to the court of

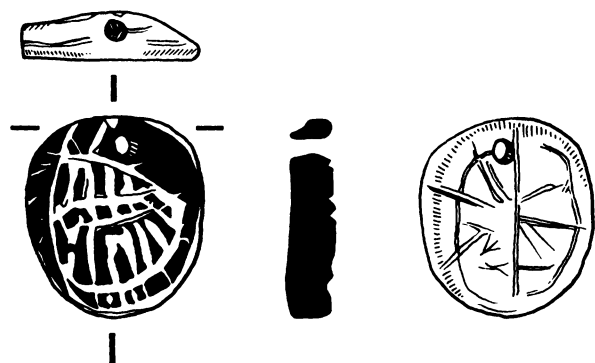


Figure 7 TA 493, a grey soft-stone pendant measuring $1.6 \times 2.3 \times 0.6$ cm (= Potts 1991: figs 142–3).

Assurbanipal at Nineveh (Potts 1990b: 393). Later, when Magan (Old Persian *Maka*, Elamite *Makkaš*) was a satrapy of the Achaemenid empire, messengers travelled between Persepolis and Oman, maintaining the ties which had long linked Magan with Elam (Potts 1990b: 395–7). Maganites, whom Herodotus calls *Mykoi*, fought with Xerxes at Doriscus in 480 BC (Potts 1990b: 398). A unique Iron Age pendant (Fig. 7) from Tell Abraq, which shows what is almost certainly a sewn reed boat, may well represent the sort of seacraft which must have been used in forging those links between Magan, Babylonia, Elam, Dilmun and the Indus Valley, which have been the subject of this essay.

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Abstract

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Rethinking some aspects of trade in the Arabian Gulf

Recent excavations at Tell Abraq in the United Arab Emirates have brought to light material dating to the third, second and first millennium BC which calls into question certain long-held views in the archaeology of the Gulf region, as well as some more recently published hypotheses. Using the material from Tell Abraq, a number of problems specifically related to trade between the Oman peninsula (ancient Magan) and her neighbours are discussed. The emerging picture is one of much greater continuity in Magan's external relations than had previously been thought.